FULL SET OF EDUCATION AND SUSTAINABILITY COMMUNITY CONVERSATION NOTES

The purpose of the Sustainable DC initiative is to create a strategic framework and vision to make the District the greenest, healthiest, and most livable city in the United States. Throughout the planning process, several "crosscutting" topic areas emerged: health, environmental education, jobs and job preparation, and social equity.

The following full set of notes from the conversation about environmental education held on June 5, 2012, represents the ideas of more than 40 individuals who participated in person or provided feedback online about how education cuts across issues of sustainability. This information will be used in the development of the Sustainable DC Implementation Plan related to education.

"Formal" education

1. **In addition to the topics covered in the Environmental Literacy Plan, are there other topics a "sustainability literate" person should know?**

- **Group 1 (Dan)**
    - What sustainability is – young people will have different definition
    - Social, cultural, environmental elements, beyond science
    - How world around "me" affects me and how I affect it
    - Population, religion, politics and their role in sustainability
    - Energy needs as culture/global culture; how wasteful we've been as people
    - Role of rest of world developing and global economy
    - Values: what do we value and how to express

- **Group 2 (John/Brendan)**
    - Economic and social issues; impact on sustainability
    - Sustainable technology – science and social/practical uses
    - Application to daily lives
    - How to affect change – behavior
    - Impact of policy, laws on society
    - Civic engagement and activism
    - Communication
    - Collaboration, working together
    - Current events (TEDx, technology)

- **Group 3 (Stacie)**
    - Systems thinking
        - Law of cause and effect
        - How things work
        - Life cycle thinking
    - Ability to assess their own environmental impacts (activities and consequences)
    - Human rights

- o Ability to explain sustainable energy systems
- o Differentiate where you live from other places (ex. – how is DC different from other parts of the U.S.? How is the U.S. different from the rest of the world?)
- o Include all 9 SDC categories in sustainability education
- o An understanding of history and an ability to understand current challenges in context
- o Empathy
- o Power of community/relationships to bring all this to fruition

- **Group 4 (Laine)**
  - o Shopping & prices – "true cost" of things or actions
  - o Externalities
  - o Long term vs. short term costs of decisions
  - o Life cycle costing
  - o Food/school gardens: where does our food come from?
  - o We don't teach people "how to find out"
  - o Connect people with people living those values – "rise above greenwashing"
  - o Service learning to empower young people to become change agents
  - o It's not the topics, it's the "how"
  - o How do we encourage curiosity?
  - o Tie ELP to the "how" of service learning

2. **What are the desired outcomes of <u>formal</u> sustainability education in terms of knowledge and behavior change?**

- **Group 1 (Dan)**
  - o That young people have <u>tools</u> to be creative and to problem solve; older people as well
  - o Kids are often the lever to get parents to act
  - o The ability to learn; need to learn to adapt in light of things changing.
  - o Students learning to tools to better society
  - o Focus programs and learning tools on those programs we value
  - o Being good stewards of natural resources beyond just nature and doing so because it's smart, not just because it's good
  - o Role of their surrounding (e.g. Chesapeake Bay) on action, natural area
  - o Sustainability education is part of education (3 Rs, etc.), not separate

- **Group 2 (John/Brendan)**
  - o Stewardship – respect for environment
  - o Paradigm shift
  - o Apply practices in daily life
  - o Change in how community looks, functions
  - o Walkable communities
  - o Leadership & responsibility
  - o Trust in function of government – respond to feedback from citizens
  - o Cleaner city

- o Career opportunity; green economy
- o Enjoyment of outdoors; greater engagement
- o Discern sustainability from greenwashing
- o Teaching others: home, school, coaching, and one-on-one
- o Critical thinking, constructive problem solving to affect change
- **Group 3 (Stacie)**
  - o Political engagement around environmental issues
  - o Track students K-12 to see if they are still engaged (ex. – are they volunteering?)
  - o Lead to creation of sustainable jobs and ability to get the jobs/readiness for green careers
  - o Increased number of projects and engagement (increase in involvement)
  - o Students would have knowledge of how to fix/rescue useful objects and have respect for materials and resources (origin of things and where they go)
  - o Love of living things
  - o Desire to teach others
  - o Involvement in existing environmental programs (e.g. – compost cab, social enterprises)
  - o Engaging public-private partnerships around business and non-profit initiatives
  - o Students will have desire/want to do/try new things
  - o Appreciation of diversity
- **Group 4 (Laine)**
  - o Critical thinking and willingness to change behavior
  - o Inspire your parents or peers
  - o Active or measured behavior change at all levels
  - o Lasting lifetime change – as your usual routine
  - o Show the direct impact (positive and negative of action and inaction) to induce behavior change; for negative, show impacts on the environment [example: One planet model of limited resources]
  - o About mobilizing and leadership developmemt
  - o The vision is seeing the benefits that are achieved
  - o "I demand my community changes, too" – scaling up
  - o Show people the benefits of change and individual action (example: Young Voices of Climate Change) or give students the tools to show….

3. **Are you aware of any particularly effective programs or activities for sustainability education taking place at formal education institutions at any level (K-12, higher education)?**
- **Group 1 (Dan)**
  - o Capital City Public Charter School: exhibition learning at every level
  - o Urban gardening school programs (DCPS and other → food and biz side of ag.)
  - o Living Classrooms
  - o Washington State has huge K-12 & beyond; superstar state
  - o Bike to School Day

- **Group 2 (John/Brendan)**
  o LEED Platinum-certified schools; student guides and educators; integrate buildings into learning
  o School renovations to LEED Platinum
  o "Landmark Forum" model
  o Maryland Green Schools – buildings, curriculum integration, outdoor learning (NGO driven)
  o Trash Free Schools – Alice Ferguson Foundation
  o IB program – Sharing the Planet (K-12)
  o Health Schools Act – food, exercise, ELP
- **Group 3 (Stacie)**
  o CCDC has a green construction program with workforce development
  o Gardens at DCPS/schoolyard greening programs (programs both during the day and aftercare)
  o Living Classrooms DC – nature walks and environmental programs for K-12
  o Program with local chefs to talk to school kids about healthy eating
  o Green features/facilities within schools
  o UDC CAUSES
  o CUA Architecture program has some focus on sustainability
  o Solar Gadgets Kit (DDOE has this)
  o Environmental As An Integrating Context (curriculum at charter schools; one trying to start up in Frederick County, others in existence)
  o Earth Echo International has a water curriculum
  o Stokes PCS has their own head chef, salad bar, on-site food prep, and contract for organic milk
  o UMD Architecture program participates in Solar Decathlon
  o Mundo Verde PCS is a Spanish immersion school with an environmental education focus
- **Group 4 (Laine)**
  o Tie to all the 9 topic areas to curriculum (Ex.: National Building Museum – see their neighborhoods in a new way; learning about the whole ecosystem as a tool to move action)
  o Not just stewardship but advocacy too, bigger than just your house (ex.: college level programs to be holistic on how to think about business and institutions such as Europe)

4. **How can the non-profit and private sectors complement work being done by formal education institutions in schools and in the community?**
- **Group 1 (Dan)**
  o Private sector can give fiscal resources
  o Green jobs
  o Internships
  o Provide expertise to students

- o Nonprofits can provide teachers & student resources
- o Opportunities for real world experiences (sustainable biz as model)
- o Workshops on real skills (making rain barrels, LID, etc.), not just "give a fish"
- o Anyone who provides services can provide learning experience → show how things are made, etc. (e.g. Woodson H.S. – contractor shared how they were doing work as part of lesson)

- **Group 2 (John/Brendan)**
  - o Greater DC Cares Impact Days
  - o DCEEC, support for ELP, in-school programs
  - o City Year
  - o Single Volunteers of DC
  - o Washington Gas, corporate sustainability offices
  - o Bethesda Green – NGO
  - o Corning – examples of IT integration into learning programs
  - o USGBC education programs; AIA
  - o Engage Chamber of Commerce, other business organizations in DC

- **Group 3 (Stacie)**
  - o Partner with non-profits to make green summer jobs more educational
  - o Create an initiative to place DC youth in green companies
  - o Formulate entrepreneurship training partnerships with businesses (particularly sustainable businesses); could tap into National Foundation for Teaching Entrepreneurship?
  - o Service-learning internship opportunities
  - o Broadband Bridge and Discotechque (sp?) events
  - o Better funding and organization. Everyone wants to work with schools, but there are barriers to that, and not everyone knows what each other is doing.
  - o Everyone wants to go to the same schools to do projects – spread out
  - o Private Eco-tourism industry (ex. "green" hop-on/hop-off bus)
  - o Help schools assess needs/fill in gaps (example: look to see if programs are meeting all needs) and look at operations outside of curriculum to make sure they are demonstrating best practices
  - o Introduce non-traditional items or courses (ex. – Model UN instead of world history; include spiritual practices
  - o Collaboration between arts/culture sector and the environment (suggestion: partnership with a nonprofit to revive Green DC map)
  - o Invite students to public meetings
  - o Mentoring opportunities (example: co.space at Penn State where students entrepreneurs live together and are mentored by in-house entrepreneurs)

- **Group 4 (Laine)**
  - o Support B Corps that embrace good values of sustainability → pipelines of those learning → jobs/businesses

- o Community providers give a different experiences
- o Tie curriculum to other community environmental education events, having the family working together
- o Get outside experts to come in the classroom and share expertise
- **How can government support nonprofits?**
- o Have schools have a structure to allow interaction
- o Provide government recognition of community action
- o Challenge & competition can encourage that
- o Don't get complacent
- o Show how different subjects are connected & interrelated in real life
- o Measure behavior change & critical thinking instead of just testing

Community education

1. **What are the desired outcomes of a <u>community</u> sustainability education in terms of knowledge and behavior change?**
- **Group 1 (Dan)**
    - o Global climate change – both sides of argument (balanced approach), but important to make sure students know if science backs up one side more
    - o 3 R's – reduction – "story of stuff"
    - o Kids connecting themselves to environment (see & know & feel connection)
    - o Basics first: have to meet human needs first, people won't focus on other issues. Example – health: food access, healthy time outside)
    - o Behavior change – electricity/energy use (benchmark beforehand and track)
    - o Time spent biking, walking; time spent in outside areas. Track obesity, blood sugar level
    - o Walkable/livable communities by area of city; # of kids walking to school
    - o Waste – reduce litter, waste
    - o Full recycling bins; increase # of recycling bins
    - o Knowledge about recycling process, so they don't dump all together
    - o People need to know <u>true</u> cost of throwing things away vs. recycling or reusing
    - o Education about reusing things, combat stigma
    - o Vocational skills on repairing things (ex. – NYC's "repair cafes")
    - o Equipment swaps – participation in such programs; knowledge, attitudes towards, # of sites, installs
    - o Educating about fiscal options
    - o How to do on small scale/co-op
    - o Helping people to connect dots (e.g. – driveways = flooding = flooded basements)
    - o Actually teaching people principles behind some engineering, etc. so they understand areas behind it (USGBC as partner)

- **Group 2 (John/Brendan)**
  - Ward-level engagement of leadership, ANCs
  - Target for education, engage in collaboration
  - Strategic presentation by location
  - Change in purchasing, engage supermarkets or other businesses
  - Competition among neighborhoods, ward for recycling or other behaviors, practices
  - Focus examples of benefits on local issues – bag law benefits
  - Demonstration <u>homes</u> or <u>facilities</u> to bring community in, demonstrate benefits (quantify)
  - Solar coop model, house tours to show how to implement new ideas
  - Sustainable DC offices in every ward – per Bethesda Green
  - Montgomery County transportation landscaping design competition
  - Focus on economic and social impacts, benefits creating more equitable community
- **Group 3 (Stacie)**
  - Transfer of sustainable values into every work field (at the worker – not just manager – level)
  - Appreciation of all parts of the city, experiences in all areas (develop a program to help people learn about the whole city and have experiences in all parts of the city)
  - Promoting effectiveness of sustainability efforts, and reporting back. Example – for litter clean up, have people be able to articulate why they should recycle, and tell others.
  - Desired outcome: Sustainable DC actually happens.
  - General knowledge and CLEAR understanding of community food systems, utility systems.
  - Educating people about backgrounds of other community members and their ability to engage.
  - An understanding of the power of consumer choice.
  - Equal opportunity for people to make healthy choices: ACCESSIBILITY
  - Creation of and participation in a sharing economy – active sharing, and people know about it
  - Measure NIMBYism – with a goal of less NIMBYism and more understanding
  - IOBY (In Our Backyard)
  - Leadership (political and not) needs to be on board and needs to be willing to take risks and try new things
  - Young people should aspire to green careers
  - Trust, respect, better relationships
  - Increase the mix of people in DC (across socio-economic/demographic categories such as age, abilities, etc.)
  - The natural environment visibly thrives in DC

- **Group 4 (Laine)**
    - Outcomes are the same as formal education
    - Study the partners, who is our community? What are they interested in? What are people's motivations? (Ex. Recycling & jobs)
    - Lifelong learning – post-formal education
    - Frame to each set for each audience (Who does the framing matters – need engagement with the community). Move through that to the environment at the endpoint, not the first thing.
    - Where are the entry points to begin? Must feel comfortable. Example: peers, community, clergy, social network.
    - Local basis of outreach
    - Change the image of the efforts/messaging
    - Understand "why" of positive and negative outcomes
        - Score them a little
        - Help people to feel connected (love)
    - Make it personal and local

2. **How will we know if community education and outreach is working and if we are successful? What should we use for specific goals or targets?**
- **Group 1 (Dan)**
    - Data - # of solar installed, etc.
    - Physical evidence – just seeing
    - CaBi – can measure
    - More students graduating from high school pursuing those careers
    - # of small biz started with sustainability focus
    - Before & after community attitude survey → measure by community
    - More parity
    - Growth in UDC CAUSES and other university sustainability tracks (American U.)
    - # tons garbage vs. # tons recycling
- **Group 2 (John/Brendan)**
    - Size of trash/recycling bins
    - More even distribution of access to sustainable practices, green space, bike lanes
    - Measure bag use, other consumer purchases
    - Measure bags, other trash in city, water
    - How often do people think about sustainability – social measures, motivations
    - Recycling rates, trash reductions
    - Water quality – swimmable Anacostia
    - Convert to dollars when you can, measure savings
    - How many people are teaching their kids?
    - Multi-agency – nonprofit surveying of knowledge, practices at home, work (pre, post tests where possible)

- o Urban ag and compost in every ward
- **Group 3 (Stacie)**
  - o Quality of life: general feeling that life is better, that people want to be here, people are enjoying what's around them
  - o Retention of residents (are populations aging in place?) as a measure of quality of life/if people like the city and feel at home here
  - o Affordability
  - o Develop quantitative and qualitative performance metrics for sustainability
  - o Develop something similar to WalkScore for all 9 areas of SDC (or for the things that you can quantify)
- **Group 4 (Laine)**
  - o Level of engagement could be a measure
  - o Not a single goal/point
  - o People helping to achieve goals that require community action
  - o First baseline then show achievement of community actions
  - o Understanding <u>why</u> some goals aren't achieved

3. **What community education and outreach programs or activities are already working well in the District or elsewhere?**
- **Group 1 (Dan)**
- **Group 2 (John/Brendan)**
  - o Casey Trees
  - o Anacostia Watershed Society
  - o AFF
  - o Bethesda Green
  - o DCEEC
  - o Farmers markets
- **Group 3 (Stacie)**
  - o Incubators/citizen circles, like HUB DC. There is an open Masters program coming soon
  - o DC SUN has both education and events
  - o Green Living DC (has yearly expo, wants to do more)
  - o Think Local First – good at rallying community around spending at local businesses
  - o Net Impact (has events around sustainability)
  - o Schoolyard Gardens & community gardening programs
  - o Farmers Markets (for example, the Mt Pleasant market educates as well as provides food)
- **Group 4 (Laine)**
  - o Example: green building/business challenge
  - o Get the actors in the room to help achieve/resolve actions (Ex. Portland)